

NATIONAL REGISTER ELIGIBILITY ASSESSMENT

VESSEL: *Cape Florida*



The LASH barge carrier *Cape Florida*, underway circa 1990s. Maritime Administration photograph.

Vessel History

Cape Florida is a Lighter Aboard Ship (LASH) barge carrier. It was launched in 1971 at Avondale Shipyard in New Orleans, Louisiana as the *LASH Turkiye* for Prudential-Grace Lines, Inc. (known as the Prudential Steamship Company prior to January 1970). Intended for the company's U.S. East Coast-Mediterranean service, the ship was the second in a flight of 11 identical ships built at Avondale Shipyards for Prudential-Grace and Pacific Far East Lines. Grace Lines operated *LASH Turkiye* in subsidized commercial service until the company sold it to Delta Lines, which renamed it SS *Delta Caribe*. The Maritime Administration (MARAD) purchased *Delta Caribe* on May 8, 1986; the vessel was placed in its Ready Reserve Force (RRF) on February 17, 1987 and renamed SS *Cape Florida*. The ship is currently moored at MARAD's Beaumont Reserve Fleet (BRF) in Beaumont, Texas. MARAD downgraded the ship to non-retention in 2016.

LASH, or lighter aboard ship vessels, were designed to transport fully-loaded barges in ocean freight service. An extension of the idea of the multimodal shipping container, the LASH system was developed to reduce the cost of shipping bulk cargo. As described in a contemporary trade journal, "[P]re-stowed lighters can be raised and lowered from the mother ship without lengthy in-port layovers, thereby offering an unparalleled express delivery service for shippers." The LASH concept was developed by naval architect Jerome L. Goldman of Friede & Goldman, Inc., of New Orleans, who

received a patent for the idea in 1966. He also founded LASH Systems, Inc., to license construction of LASH vessels based on his concept.¹

These were the first LASH ships ordered for construction anywhere in the world, although two LASH ships built in Japan for Norwegian owners were the first to enter service. The five Prudential-Grace ships were the *LASH Italia* (delivered 1970, scrapped 1987), *LASH Turkiye* (1970), *LASH Espana* (1970, now the *Cape Fear*²), *LASH Atlantico* (1974, scrapped 1996), and *LASH Pacifico* (1974, scrapped 1995). The six Pacific Far East ships were the *Thomas E. Cuffe*, *Golden Bear*, *Pacific Bear*, *Japan Bear*, *China Bear*, and *Philippine Bear*.³

The ship was constructed with a capacity of 73 cargo lighters. The custom lighters used in the LASH system, each measuring 61'-6" x 31'-2" x 14'-6" and weighing 500 short tons fully loaded, were built under a separate Avondale contract. To provide maximum cargo flexibility, *LASH Turkiye* and its sisters were equipped to carry barges, standard 20' containers, or a combination of both. According to a LASH Systems advertisement, the ship was expected to "provide for 80% of its general cargo capacity in the form of pre-loaded LASH lighters, with 20% of the capacity in cellularized standard containers. This ratio of lighters to containers can readily and easily be changed as the trade demands." The ship was also built with tanks for 7,000 tons of liquid cargo or bulk grain.⁴

SERVICE HISTORY

Prudential-Grace deployed the ship at first as part of its service to the Mediterranean from New York, Philadelphia, and Norfolk. In March 1972, Prudential-Grace changed the service to direct sailings from New York and Baltimore to the Mediterranean.

In 1974, *LASH Turkiye* often sailed from Port Newark, New Jersey, to Istanbul, Turkey; Piraeus, Greece; and Barcelona, Spain. In 1975, the ship's port calls included Brooklyn, New York and Naples, Italy.⁵

Prudential-Grace was renamed Prudential Lines, Inc., in September 1974. In 1977 and 1978, the company sold its Latin American services and vessels to Delta Steamship Lines, Inc. This sale included the *LASH Turkiye*, which Prudential sold for \$22 million on

¹ Quote from Bob Ware, "The Editor's Log," *Marine Engineering / Log* (August 1870), 98; John Pope, "Jerome Goldman, a naval architect and real estate developer, dies at 89," *New Orleans Times-Picayune*, Sept. 10, 2013; Jerome L. Goldman, "Integrated Barge and Cargo Ship Construction," U.S. Patent 3,273,527, Sept. 20, 1966.

² *Cape Fear* is currently moored at MARAD's Suisun Bay Reserve Fleet in Benicia, California.

³ Dillon, "Forty Years of Ship Designs," 186-87; "U.S.-built LASH Now in Service," *Marine Engineering / Log* (December 1970), 74; Frank A. Gerhardt, "The Maritime Administration Shipbuilding Program from 1950 to 1984," chart reproducing contract data found in the Records of the Maritime Administration (RG 357), National Archives and Records Administration, http://appendix.usmaritimecommission.de/documents/documents_main.htm.

⁴ Dillon, "Forty Years of Ship Designs," 186; "LASH Ship Launched for Prudential-Grace Lines," *Marine Engineering / Log* (Oct. 1970), 74.

⁵ "Prudential Sailings Set," *Baltimore Sun*, March 31, 1972, C7; "Shipping / Mails," *New York Times*, March 24, 1974; "Shipping / Mails," *New York Times*, April 1, 1975.

December 30, 1977. The new owners renamed the ship *Delta Caribe* on June 16, 1978, and it continued to sail in liner service to Venezuela from Brooklyn and other U.S. East Coast cities.⁶

United States Lines (USL) purchased Delta Steamship Lines in 1985, taking possession of *Delta Caribe* on January 25, 1985. USL renamed the vessel *American Caribe*.⁷ Unable to use the ship profitably, however, USL sold it to MARAD on May 8, 1986. MARAD assigned the ship to the RRF with a five-day activation status and renamed it *Cape Florida* on February 17, 1987. It was initially outported to Mobile Dock Services, Inc., Mobile, Alabama, under the control of the BRF.⁸

At the time of Operation *Desert Shield* in August 1990, the RRF included 96 ships, 68 percent of which were in a five-day readiness status. Between the beginning of the operation and late February 1991, the U.S. government shipped about 3.3 million short tons of dry cargo to the Persian Gulf in support of military operations. About 85 percent of this was carried by sea. Of about 344 vessels that participated in the sealift, *Cape Florida* was one of 79 RRF vessels activated for service. The ship was ordered activated on August 14, 1990, and turned over to the U.S. Navy's Military Sealift Command on October 18, a 60-day period that was far longer than the vessel's nominal five-day activation period. Many of the RRF activations during Operations *Desert Shield* and *Desert Storm* took longer than their specified times. Only 15 ships activated on time, and 37 activated more than five days late. Most of the delays were caused by mechanical failures.⁹

The ship was moved to Wilmington during activation to allow barges in the holds to be discharged. Once accepted by MSC, however, a lack of barges in the port delayed loadout. Not until December 10, 1990, was the vessel loaded. It then sailed for Ad Dammam, Saudi Arabia, where it arrived January 14, 1991, with its cargo of ammunition.¹⁰

Cape Florida subsequently carried U.S. military cargo from Newport, England, and Bremerhaven, Germany, to Ad Dammam, before being deactivated November 20, 1991. The ship was prepared for layup at Metal Trades, Inc., Hollywood, South Carolina,

⁶ *Cape Florida* ex-LASH *Turkiye* vessel status cards, MARAD Vessel History Database, <http://www.marad.dot.gov/sh/ShipHistory/Detail/737>; Jeff Kosnett, "Sale of vessels to Delta leaves Prudential with only 3 ships," *Baltimore Sun*, June 24, 1978, A9; "Delta Line Combined Fleet Adds New Ports, Executives Named," *Maritime Reporter and Engineering News*, July 15, 1978, 17.

⁷ *Cape Florida* ex-LASH *Turkiye* vessel status cards; "MARAD Approves Sale of Delta Steamship to United States Lines," *Maritime Reporter and Engineering News* (March 1985), 5.

⁸ *Cape Florida* ex-LASH *Turkiye* vessel status cards.

⁹ "RRF Activation Summary (Desert Shield / Desert Storm)," Maritime Administration files, Washington, D.C., n.p.; Ronald F. Rost, John F. Addams, and John J. Nelson, *Sealift in Operation Desert Shield / Desert Storm: 7 August 1990 to 17 February 1991*, Report CRM 91-109 (Alexandria, Va.: Center for Naval Analyses, May 1991), 1-5, 11, B3. Seventy RRF vessels were activated for these operations, but two additional RRF vessels, activated for another mission, also made Desert Shield cargo deliveries.

¹⁰ Erhard Koehler, "RRF Operation Desert Shield / Desert Storm readiness notes," Maritime Administration files, Washington, D.C.; Rost, *Sealift in Operation Desert Shield*, B-1, B-7.

between May 1 and August 19, 1992. This work included installation of domestic reefers and MSD units, plus installation of a new LASH barge crane, removed from “a Waterman Steamship Co. LASH vessel currently laid up in the Beaumont Reserve Fleet.”¹¹

Beginning in 1992, the ship was managed for MARAD under contract by Violet Dock Port, Inc., of Violet, Louisiana. In 2000, management shifted to Pacific Gulf Marine, Inc.¹²

The ship was activated for Operation *Iraqi Freedom* on October 14, 2004, and deactivated January 7, 2005. *Cape Florida* was subsequently downgraded from RRF status and classified for retention as militarily useful on July 31, 2006. In 2016, MARAD downgraded the ship to non-retention.



A view of *Cape Florida*'s stern at a pier with a full load. Maritime Administration photograph.

DESIGN DESCRIPTION

Cape Florida was built as the *LASH Turkiye*, the second in a flight of 11 ships built to the same plans for Prudential-Grace Lines and Pacific Far East Lines between summer 1969 and spring 1973. The ship was described in the professional press:

Her huge hull, with clipper bow and broad transom stern, has a long forecastle forward topped by three tiers of streamlined superstructure. The main deck extends after of the forecastle for some 600 ft; its utilitarian character shows that its sole function is the carriage of lighters and

¹¹ MARAD Division of Ship Maintenance and Repair. Office of Ship Operations. *Readiness Assessment of the RRF*, August 28, 1992. Maritime Administration files, Washington, D.C., n.p.

¹² “MARAD Awards Yards Layberthing Contracts Worth \$18 Million,” *Maritime Reporter and Engineering News* (May 1992), 71; “Ready Reserve Force (RRF) Ship Manager,” <http://www.globalsecurity.org/military/agency/dot/trf-sm.htm>.

containers on and below its enormous hatch covers. Heavy crane rails run the entire length of the main deck, and extend well beyond the stern of the ship, supported on a sturdy cantilever structure. Above the main deck, the dominant elements are the huge LASH crane, the container crane, and the twin stacks and houses set hard against the sides of the vessel, some one-third of the length from the stern.¹³

The ship was designed for a high service speed and has fine lines fore and aft as well as a protruding bulb bow. Short but deep bilge keels are fitted to reduce roll, and the ship carries passive anti-roll tanks. The hull is longitudinally framed except near the bow to provide deep open holds without intervening decks. Longitudinal bulkheads outboard of the holds serve as side tanks.¹⁴

As originally built, the ship provided dayroom, bedroom, and bath accommodations for the master, chief mate, chief engineer, and first assistant engineer; combined dayroom/bedroom plus bath accommodations for the other officers; and private cabins for the balance of the crew, with private baths for senior ratings and semi-private for junior ratings. During periods of activation with Military Sealift Command, the ship had a crew of 24.¹⁵

The ship is powered by two Babcock & Wilcox boilers supplying two DeLaval steam turbines geared to a single shaft and a single, 23'-diameter, four-bladed screw. Maximum shaft horse power when new was 32,000 at 105 rpm. Service speed was 22.5 knots. The ship was not built with additional horsepower for national defense purposes. Steering is through a semi-balanced rudder carried on a horn.¹⁶

Ship's electrical service is supplied by two turbogenerators, one of 2,500 kW capacity powered by steam, and a second diesel generator with 2,000kW capacity. The ship has one evaporator with a capacity of 25,000 gallons per day.

Cape Florida can transport between 71 and 77 standard cargo barges or about 840 containers. The ship has three 110'-long cargo holds forward of the engine room and two shorter holds aft of the engine room. The lighters can be stacked as much as four high in the holds. Thirteen 57-ton watertight steel pontoon hatch covers and one 81-ton two-panel folding hatch cover secure the lower holds. The ship is self-loading and -unloading, with a 446-ton-capacity traveling gantry crane for barge handling and a 30-ton-capacity traveling crane for container handling. The ship also has two 5-ton cargo

¹³ "U.S.-built LASH Now in Service," *Marine Engineering / Log* (December 1970), 74.

¹⁴ Details of the ship's construction and equipment from "LASH Italia, First U.S.-Built Barge Carrier Completed," *Marine Engineering / Log* (January 1971), 37-41, 80.

¹⁵ Norman Polmar, *The Naval Institute Guide to the Ships and Aircraft of the U.S. Fleet*, 18th ed. (Annapolis, Md.: Naval Institute Press, 2005), 310.

¹⁶ Polmar, *Naval Institute Guide*, 310; Dillon, "Forty Years of Ship Designs," 206.

cranes. In normal operation, the ship can load or discharge a lighter in about 20 minutes.¹⁷

Two 50-person-capacity lifeboats are carried on davits on either wide of the deckhouse.

Historical Integrity

The overall condition of *Cape Florida* is good; it has experienced only normal wear and aging for a vessel of its age. The ship did not undergo any substantial modifications during its service life and it has retained much of its original form and its overall historical integrity.

Statement of Significance

The LASH concept was developed by naval architect Jerome L. Goldman of Friede & Goldman, Inc., of New Orleans. *Cape Florida* was the second in a flight of 11 identical LASH ships built at Avondale Shipyards, Inc., New Orleans. These were the first LASH ships ordered for construction anywhere in the world, although two LASH ships built in Japan for Norwegian owners were the first to enter service.

The ship activated for service during Operations *Desert Shield/Desert Storm*, where it, along with 79 others MARAD vessels, provided war materiel in support of U.S. and coalition forces. It also activated for use in Operation *Iraqi Freedom* in 2004–05.

National Register Eligibility Statement

Cape Florida is not 50-years-old and it does not possess the extraordinary historical significance necessary under Criteria Consideration G or in any category necessary to be eligible for listing on the National Register of Historic Places. While it did participate in *Desert Shield/Desert Storm* in 1990-91 it was one of 79 RRF vessels activated by the navy to support those operations and its role was not significant enough to qualify under Criteria A, particularly considering the recent nature of those operations.

Date: 29 March 2018

Determination: NOT ELIGIBLE

¹⁷ Joseph S. Helewicz, "Lash Italia's first docking receives no fanfare here," *Baltimore Sun*, Jan. 9, 1971, B7

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